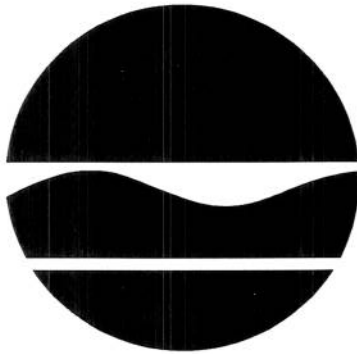


New York State Department of Environmental Conservation  
Division of Hazardous Waste Remediation  
50 Wolf Road  
Albany, NY 12233-7010

AMERICAN BAG & METAL COMPANY, INC.  
(Inactive Hazardous Waste Site #734069)

## 104(e) SITE SUMMARY REPORT

Onondaga Lake Project



July 1996  
Final

## **American Bag & Metal Company, Inc. (ABM) 104(e) Site Summary Report**

### **I. Site Description**

#### **A. Location**

American Bag & Metal Company, Inc. (ABM) is located at 400 Spencer Street, in the City of Syracuse, Onondaga County, New York. ABM is located approximately one (1) mile southeast of Onondaga Lake. Onondaga Creek flows in a northwest direction through the facility. The site is defined as the western portion of the facility (i.e. west of Onondaga Creek) and the west bank of Onondaga Creek adjacent to the facility. Spencer Street borders the facility to the southeast. Across Spencer Street to the south is the location of the former Syracuse Benzol Company.

##### **1. Local Surface Hydrology**

Onondaga Creek flows through the facility in a northwesterly direction to the Barge Canal and into Onondaga Lake.

##### **2. Local Geology**

Based on borings done during previous studies, the upper 5 to 10 feet of the on-site soil is fill consisting of gravel, cinders, coal fragments, wood and brick fragments. Below this layer is sand with traces of silt and weathered shale.

##### **3. Local Hydrogeology**

Local groundwater presumably flows into Onondaga Creek. Site groundwater was observed at a depth of 12 feet below the ground surface during an on-site boring conducted in 1991. Local groundwater ranges from 10.5 to 16 feet below the ground surface based on 1991 boring logs.

#### **B. Owners and Operators**

ABM has been operating at this facility since 1965. From 1965 to 1972, the property was owned by Eva Schotz and leased to ABM. Since 1972, the property has been owned by David and Irving Schotz, owners and operators of ABM.

#### **C. Nature of Operations**

ABM operates a scrap metal business at the Spencer Street site. Operations consist of receiving scrap metal, sorting and/or grading of the scrap metal, torching (which is no longer done as a regular operation), baling and shipment to market users. Nonferrous operations are conducted inside the building on the western portion of the facility (west of Onondaga Creek) and consist of baling and shearing. Ferrous operations are conducted outside on the eastern portion of the facility (east of Onondaga Creek) and consist of sorting and shipping.

ABM also recycled insulated cable. The cable was stripped and the metal wiring was recycled. The insulation was either burned in the on-site incinerator or recycled depending upon the material it was made of.

#### D. Materials Used

ABM imported, sorted and shipped metals, both ferrous and nonferrous, for recycling. Wiring was also stripped for the salvage of the metal inside the wire insulation.

At one time during the 1970's, ABM contracted with Niagara Mohawk Power Corporation (NiMo) to take "fully drained" transformers from NiMo. The transformers were received by ABM, dismantled, and the parts were sorted and sold for scrap. There is no available information as to whether "fully drained", in this case, constitutes that the transformers were rinsed with solvent before being received by ABM, nor at what concentrations of PCBs, if any, were contained in the transformer dielectric fluid.

#### E. Disposal of Hazardous Substances or Hazardous Wastes

##### 1. Types/Characteristics/Quantities

In the mid 1970's the New York State Department of Environmental Conservation (NYSDEC) discovered oils dripping off of scrap metal and leaking out of the roll-off box which contained the metal. ABM removed the stained soil and disposed of it off-site. There is no available information as to the precise location of the removal, quantity of soil removed, disposal destination, nor chemical composition of the oil.

Consultants for the New York State Department of Transportation (NYSDOT) discovered soil contaminated with PCB Aroclor 1260 at the ABM facility. Four (4) soil samples were obtained, one (1) from each corner, at the intersection of Spencer Street and Onondaga Creek in December of 1991 as part of a hazardous waste assessment for the Spencer Street Bridge right-of-way investigation. Further investigation was conducted by NYSDOT in October of 1992, west of Onondaga Creek on ABM property and on the west creek bank, adjacent to the facility. The results of this investigation identified PCB Aroclor 1260 in soils at concentration exceeding 50 parts per million (ppm). The NYSDEC was notified by NYSDOT following the investigation. The full vertical and horizontal extent of contamination has yet to be determined.

In 1993, Stearns & Wheeler Environmental Engineers and Scientists conducted a soil investigation for ABM in the same location as the 1992 NYSDOT investigation. This investigation verified the presence of PCB contamination in soil at the ABM facility at similar levels to the NYSDOT investigations.

## 2. Disposal Locations/Areas of Concern (On-Site and Off-Site) and Contribution to Other Potential Subsites

### a. Areas of Concern

The western portion of the facility, the west bank of Onondaga Creek and Onondaga Creek itself are the areas of concern related to this site. The analyses of soil samples collected from the western portion of the facility and on the west bank of Onondaga Creek have detected PCB Aroclor 1260 at numbers exceeding recommended soil cleanup objectives as per NYSDEC Division of Hazardous Waste Remediation (DHWR) Technical and Administrative Guidance Memorandum (TAGM) #4046. Some of the values also exceeded 50 ppm PCBs, which qualifies the soil as hazardous waste per NYSDEC 6NYCRR Part 371 Identification and Listing of Hazardous Wastes. Surface water and groundwater sampling have not been conducted on-site. While PCBs were not detected in Onondaga Creek sediment samples collected adjacent to the site as part of the 1992 NYSDOT investigation, it cannot be determined that site activities have not impacted creek sediment due to concerns associated with elevated detection limits (0.6 ppm) for the sediment data.

### b. METRO

The sanitary sewers are the facility's only discharge to METRO. The facility does not produce process waste water.

## F. Status of Regulatory Involvement

As discussed in Section I.E.1., in the mid 1970's the New York State Department of Environmental Conservation (NYSDEC) discovered oils dripping off of scrap metal and leaking out of the roll-off box which contained the metal. ABM removed the stained soil and disposed of it off-site.

The NYSDEC is currently in the process of negotiating an RI/FS Consent Order and an RI Scope of Work with ABM. The site is listed as a Class 2a on the New York State Inactive Hazardous Waste Disposal Site Registry.

## II. Potential Pathways for Release of Hazardous Substances to the Lake System

### A. Soil

PCB Aroclor 1260 contamination has been determined to exist on-site at levels up to 180 ppm. The contamination exists in an area west of Onondaga Creek. The areal extent of contamination is known to be at least 40 by 80 feet in size, and extend from the surface to a depth of at least 18 inches below the ground surface. However, the full areal and vertical extent of contamination has yet to be determined.

## B. Groundwater

No groundwater sampling has been conducted on-site. However, the water table exists at approximately 12 feet below the ground surface as determined from a soil boring conducted in 1991. The 12 foot core was composited and analyzed for PCBs as part of the NYSDOT investigation mentioned above. PCB Aroclor 1260 was detected at 5.3 ppm. In the investigation conducted by Stearns and Wheeler for ABM, 10 foot composite samples from 3 locations were also analyzed for PCBs. These samples detected only PCB Aroclor 1260 at concentrations less than 1 ppm. Samples collected in the top 18 inches of soil at the site contain high concentrations of PCBs. These sample results indicate that the PCB contamination may be contained in the upper fill area and may not be impacting groundwater, however the delineation of the PCB contamination in soil must be completed in order to confirm this.

## C. Surface Water

1. SPDES - This is no SPDES discharge from the facility.
2. Storm Water - Storm water runoff is uncontrolled at the facility and is believed to discharge into Onondaga Creek via direct runoff. Some of the storm water runoff from the bank of Onondaga Creek discharges into the creek.

## D. Air

ABM infrequently operates an on-site incinerator for the reclamation of copper from insulated wiring. ABM obtained an air permit (#311500 1101) for the incinerator in January of 1989. The incinerator is used to burn the insulation off of copper wire to facilitate the recovery of the copper. There is no documentation as to the volume of insulation burned.

# III. Likelihood of Release of Hazardous Substances to the Lake System

## A. Documented Releases

There have been no known documented releases to the Onondaga Lake System from the ABM facility. However, PCB Aroclors 1254 and 1260 have been detected in fish in Onondaga Creek in the Spencer Street Bridge vicinity.

## B. Threat of Release to the Lake System

### 1. Extent of contaminants on-site

Soils contaminated with PCB Aroclor 1260 are known to exist in an area at least 40 by 80 feet in size, and at least to a depth of 18 inches below the ground surface. However, the vertical and horizontal extent of contamination has yet to be determined. PCBs were not detected in Onondaga Creek sediment samples obtained adjacent to the site. However, as discussed above in Section I.E.2.a.,

the available analytical data is not adequate to determine if the sediments have been impacted by the site. Surface water and groundwater sampling has not been conducted at the site.

## 2. Migration Potential of Contaminants

It is not expected that PCBs have migrated to Onondaga Creek through groundwater transport based on historical sampling data and groundwater levels obtained from boring logs. However, further soil sampling to determine the vertical extent of PCB contamination will be needed to determine if limited groundwater sampling is necessary at the site.

High levels of PCBs (up to 180 ppm) have been detected in surficial soil on the west bank of Onondaga Creek adjacent to the facility. Accordingly, there is a potential for surficial runoff to transport PCBs to Onondaga Creek.

## 3. Proximity to Onondaga Lake System

High levels of PCBs (up to 180 ppm) have been detected in surficial soil on the west bank of Onondaga Creek adjacent to the facility. Onondaga Creek flows directly into Onondaga Lake and is part of the Onondaga Lake System. The facility is approximately one (1) mile from Onondaga Lake.

# IV. Potential for Adverse Impacts to the Onondaga Lake System Due to Release or Threat of Release of Hazardous Substances

## A. Hazardous Substance Characteristics

### 1. Mobility

PCBs generally have limited mobility in the environment since PCBs have a low vapor pressure and low water solubility. In addition, because of high octanol-water partition coefficients and strong adsorption to soils and sediment, significant leaching of PCBs from soils does not occur under most conditions. NYSDEC TAGM #4046, Appendix A, Table 3, lists 10 ppm as the soil cleanup objective to protect groundwater. PCBs adhering to sediment or soil particles may also be mobilized by surficial or storm water passing over the sediment or soil.

### 2. Toxicity

PCBs have been demonstrated to cause toxicological responses including carcinogenic, reproductive, teratogenic, neurological/developmental, systemic and immunological effects. PCBs are considered probable human carcinogens based on hepatocellular carcinomas in rodent studies and inadequate yet suggestive evidence of excess risk of liver cancer in humans by ingestion and inhalation or dermal contact.

### 3. Persistence

PCBs are persistent in the environment due to their high stability and relative inertness. In aquatic systems, low amounts of PCBs are found dissolved in the water column due to their low solubility and preferential partitioning to suspended matter and sediment. In these systems, PCB transport and persistence is governed by the particle transport processes. In systems such as Onondaga Lake, PCBs are expected to persist in the bottom sediments since there are no significant sediment removal processes. PCBs have been known to degrade to a limited extent via dechlorination in anaerobic sediments, but this process is limited in its ability to eliminate the majority of the PCB mass. Aerobic degradation is also known to occur, but this process is generally limited to the lightest PCB congeners. Given the relatively heavy congeners found in the aroclor mixture found on site (Aroclors 1260), these natural degradation processes would not be expected to greatly affect the persistence of PCBs released from the site.

### 4. Bioaccumulation

PCBs are highly lipophilic and tend to bioaccumulate within living organisms. Significant levels of PCBs may often be detected in tissue of biota living in contaminated areas because PCBs adhere to the organisms lipids (fatty tissue). The higher the concentration of PCBs in the organism, the greater the potential for the organism to show toxic responses because of the PCBs.

#### B. Quantity of Substance

The full volume of PCB contaminated soil has yet to be determined at ABM. However, it is known that soil contaminated with PCBs exists in an area at least 40 by 80 feet in size, and to a depth of at least 1.5 feet at the site.

#### C. Levels of Contaminants

Soil contamination ranges from less than 1 ppm to 180 ppm of PCB Aroclor 1260 at the site.

#### D. Impact on Special Status Areas

Onondaga Creek is a class C watercourse as defined by the New York State Codes, Rules and Regulations, Title 6, Chapter X, Part 701, Paragraph 710.19 Classes and standards for fresh surface waters. The area around the facility is industrial and there are no known special status areas.

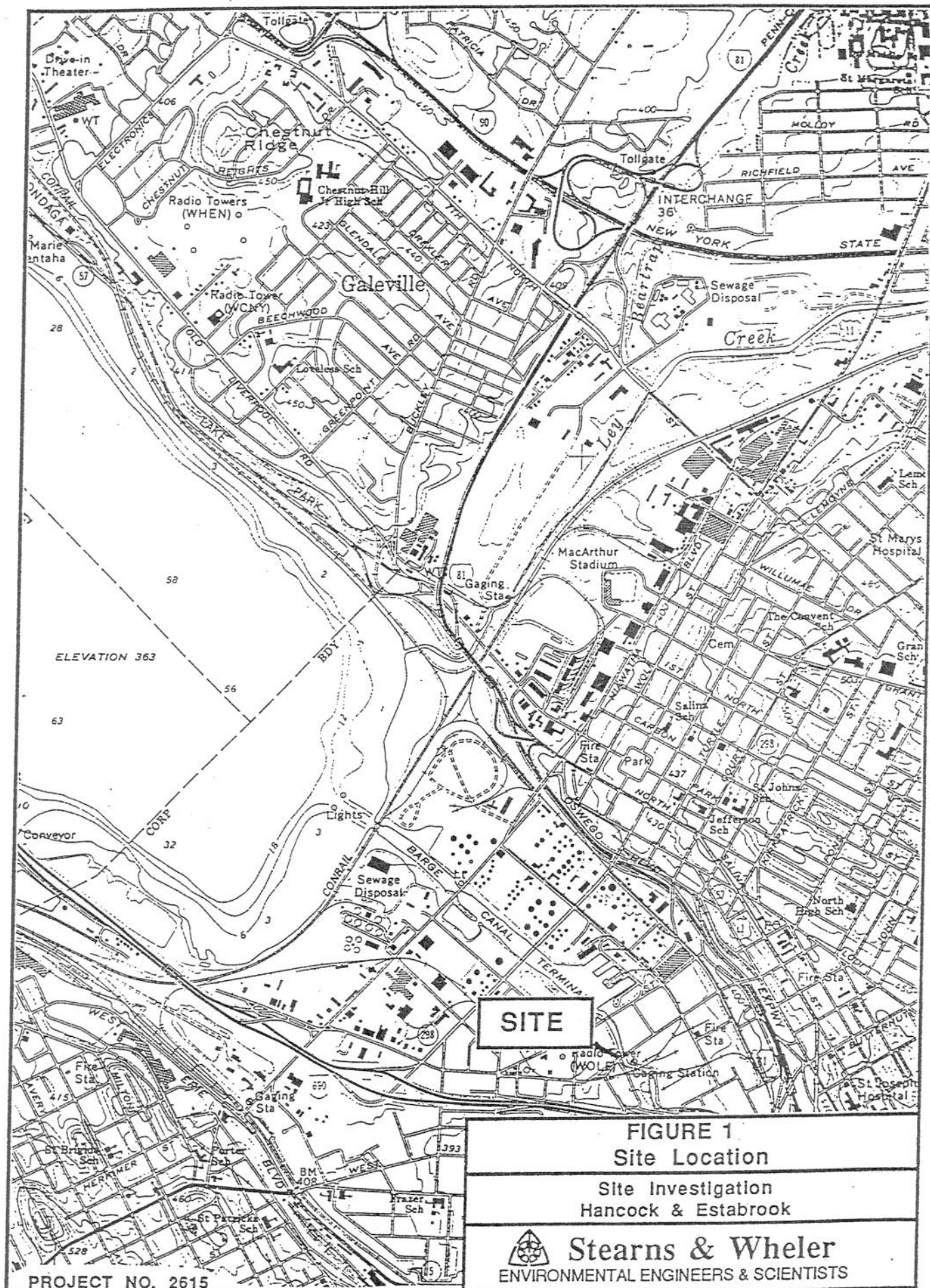
### V. Summary of Concerns

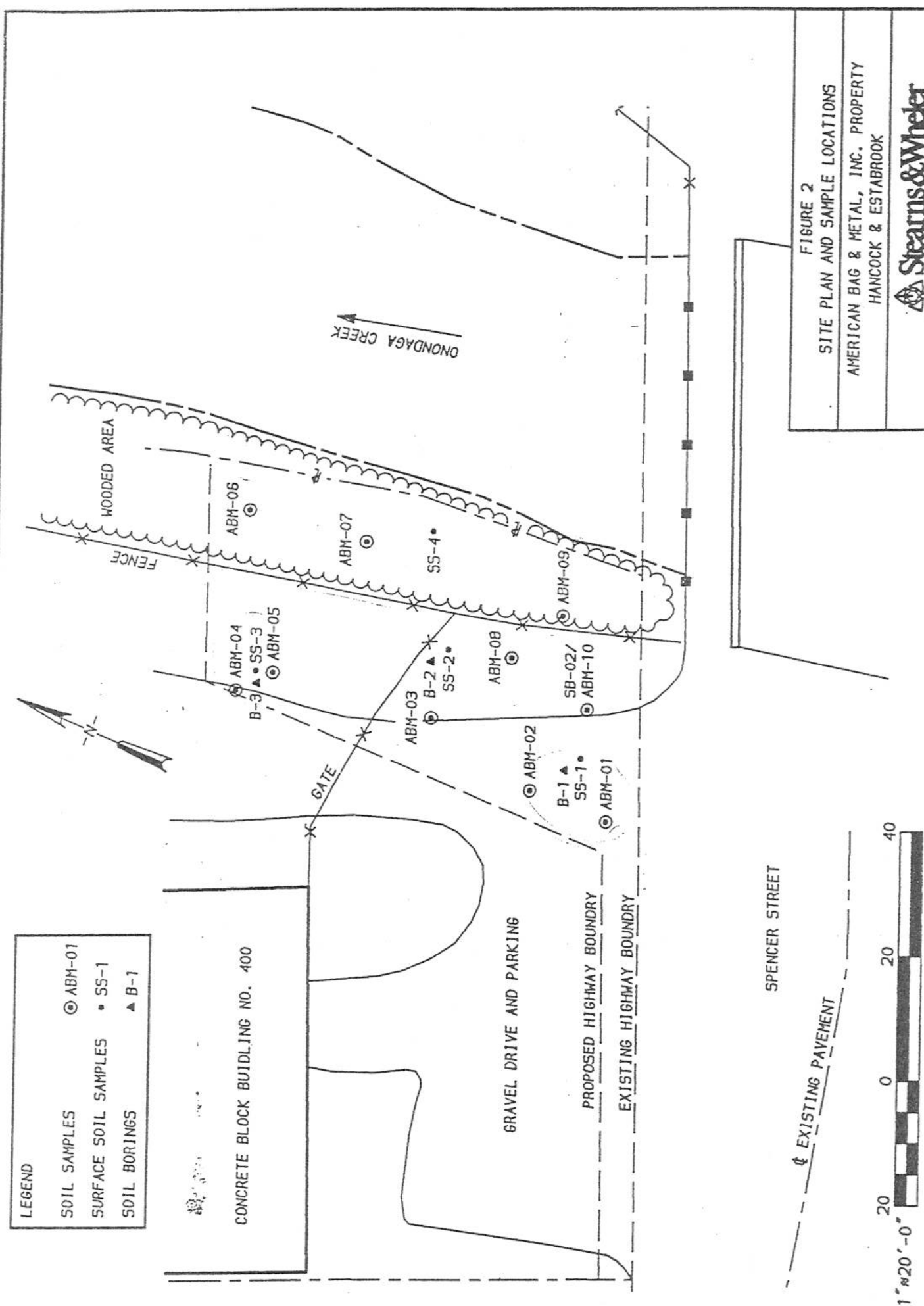
On-site soils, including those on the west bank of Onondaga Creek adjacent to the facility, have been determined to contain high levels of PCB Aroclor 1260. While PCBs have not been detected in sediment samples, the available information is not adequate to determine whether

site activities have impacted the sediments or biota in Onondaga Creek. Groundwater and surface water sampling has not been conducted to date. The vertical and horizontal extent of contamination has yet to be determined, however past soil sampling data and the site's groundwater elevation currently suggest that groundwater may not be impacted. Since PCBs exist at elevated concentrations (up to 180 ppm) in surficial soil samples on the bank of Onondaga Creek and at the facility, the potential exists for storm water runoff to convey PCBs to Onondaga Creek and the Onondaga Lake System.

## VI. References

1. January 23, 1989 letter from Joanne L. March, NYSDEC to Irving Shotz, ABM.
2. Hazardous Waste Assessment Report for Spencer Street Bridge Over Onondaga Creek (URS Consultants, Inc., April 1992).
3. September 10, 1992 letter from Howard Trussel, URS Consultants, Inc. to Mr. Richard Steel, NYSDOT.
4. November 2, 1992 letter from Gerald S. Sikora, URS Consultants, Inc. to Mr. Geoffrey Christoff, NYSDOT.
5. Site Investigation American Bag & Metal, Inc. Property (Stearns and Wheeler, October 1993).
6. ABM 104(e) Responses of March 22, 1995 and January 31, 1996.





**FIGURE 2**  
**SITE PLAN AND SAMPLE LOCATIONS**  
 AMERICAN BAG & METAL, INC. PROPERTY  
 HANCOCK & ESTABROOK

